

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	3382-65133-01
Application Number	10/642,550
Filing Date	August 15, 2003
First Named Inventor	Thumpudi
Art Unit	2641
Examiner Name	not yet assigned

U.S. PATENT DOCUMENTS

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Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
/JR/		5,079,547	January 7, 1992	Fuchigama et al.
/JR/		5,260,980	November 9, 1993	Akagiri et al.
/JR/		5,388,181	February 7, 1995	Anderson et al.
/JR/		5,539,829	July 23, 1996	Lokhoff et al.
/JR/		5,627,938	May 6, 1997	Johnston, James D.
/JR/		5,661,755	August 26, 1997	Van De Kerkhof et al.
/JR/		5,686,964	November 11, 1997	Tabatabai et al.
/JR/		5,956,674	September 21, 1999	Smyth et al.
/JR/		6,029,126	February 22, 2000	Malvar
/JR/		6,058,362	May 2, 2000	Malvar
/JR/		6,115,688	September 5, 2000	Brandenburg et al.
/JR/		6,182,034	January 30, 2001	Malvar
/JR/		6,240,380	May 29, 2001	Malvar
/JR/		6,341,165	January 22, 2002	Gbur et al.
/JR/		6,766,293	July 20, 2004	Herre et al.
/JR/		6,771,777	August 3, 2004	Gbur et al.

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Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
/JR/		6,934,677	August 23, 2005	Chen et al.
/JR/		20020143556	October 3, 2002	Kadatch
/JR/		20030236580	December 25, 2003	Wilson et al.
/JR/		20040044527	March 4, 2004	Thumpudi et al.
/JR/		20050065780	March 24, 2005	Wiser et al.


FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee
/JR/		Europe	0910927	April 28, 1999	Gbur et al.
/JR/		Europe	0931386	July 28, 1999	Herre et al.

OTHER DOCUMENTS

Examiner's Initials*	Cite No. (optional)	
/JR/		Brandenburg, "ASPEC CODING", <i>AES 10th International Conference</i> , pp. 81-90 (1991).
/JR/		"ISO/IEC 13818-7, Information Technology -- Generic Coding of Moving Pictures and Associated Audio Information -- Part 7: Advanced Audio Coding (AAC), Technical Corrigendum 1" 22 pp. (1998).
/JR/		Jesteadt et al., "Forward Masking as a Function of Frequency, Masker Level, and Signal Delay," <i>Journal of Acoustical Society of America</i> , 71:950-962 (1982).
/JR/		Lutfi, "Additivity of Simultaneous Masking," <i>Journal of Acoustic Society of America</i> , 73:262-267 (1983).

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/JR/		5,524,054	06-1996	Spille
/JR/		5,629,780	05-1997	Watson
/JR/		5,661,823	08-1997	Yamauchi et al.
/JR/		5,682,152	10-1997	Wang et al.
/JR/		5,701,346	12-1997	Herre et al.
/JR/		5,812,971	09-1998	Herre
/JR/		5,835,030	11-1998	Tsutsui et al.
/JR/		5,974,380	10-1999	Smyth et al.
/JR/		6,041,295	03-2000	Hinderks
/JR/		6,064,954	05-2000	Cohen et al.
/JR/		6,249,614	06-2001	Kolesnik et al.
/JR/		6,393,392	05-2002	Minde
/JR/		6,445,739	09-2002	Shen et al.
/JR/		6,658,162	12-2003	Zeng et al.
/JR/		6,738,074	05-2004	Rao et al.

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FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee
/JR/		Europe	EP 0597649	05-1994	Suzuki
/JR/		Europe	EP 0669724	08-1995	Akagiri
/JR/		WIPO	WO 99/43110	08-1999	Absar et al.

OTHER DOCUMENTS

Examiner's Initials*	Cite No. (optional)	
/JR/		Bier, "Digital Audio Compression: Why, What, and How," © 2000-2002 Berkeley Design Technology, Inc., 12/2/2002, 15 pages.
/JR/		Bosi et al., "ISO/IEC MPEG-2 Advanced Audio Coding," Journal of the Audio Engineering Society, Audio Engineering Society, Vol. 45, No. 10, pages 789-812 (1997).
/JR/		Brandenburg, "MP3 and AAC Explained," AES 17th International Conference on High Quality Audio Coding, 1999, 12 pages.
/JR/		Gibson et al., Digital Compression for Multimedia, Title Page, Contents, "Chapter 8: Frequency Domain Speech and Audio Coding Standards," Morgan Kaufman Publishers, Inc., pp. 263-290 (1998).
/JR/		Gillespie et al., "Speech dereverberation via maximum-kurtosis subband adaptive filtering," Proc. IEEE ICASSP, 2001, pp. 3701-3704.
/JR/		Herre, "From Joint Stereo to Spatial Audio Coding - Recent Progress and Standardization," Proc. Of the 7th Int. Conference on Digital Audio Effects (DAFx'04), 2004, pages 157-162.
/JR/		Herre et al., "Intensity Stereo Coding," presented at AES 96th Convention, 1994, 11 pages.
/JR/		ISO/IEC 13818-7, Information technology - Generic coding of moving pictures and associated audio information - Part 7: Advanced Audio Coding (AAC), 150 pp. (1997).
/JR/		Püschel et al., "The Algebraic Approach to the Discrete Cosine and Sine Transforms and their Fast Algorithms," SIAM Journal of Computing 2003, Vol. 32, No. 5, pp. 1280-1316.
/JR/		"Radio Engineering," authored by KPR i-Services, Inc., printed from internet on 12/13/2005, 3 pages.
/JR/		Schroeder, "'Colorless' Artificial Reverberation," presented at Audio Engineering Society 12th Annual Meeting, 1960, 18 pages.
/JR/		Schroeder, "Natural Sounding Artificial Reverberation," presented at the Audio Engineering Society 13th Annual Meeting, 1961, 18 pages.
/JR/		Search Report for European Patent Application No. 03 020 110.7.

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/JR/		Search Report for European Patent Application No. 03 020 111.5.
/JR/		"Smart Project - Algebraic Theory of Signal Processing," http://www.ece.cmu.edu/~smart/papers/dttaglo.html , printed from internet on 6/30/2006, 2 pages.
/JR/		Smith, "Physical Audio Signal Processing: for Virtual Musical Instruments and Digital Audio Effects," (Global Contents - 13 pages, Allpass Filters - 2 pages, Schroeder Allpass Sections - 2 pages, and A Schroeder Reverberator called JCRRev - 2 pages) of online book at http://ccrma.stanford.edu/~jos/pasp/ , Center for Computer Research in Music and Acoustics (CCRMA), Stanford University, printed from internet on 12/20/2005, 19 pages.

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FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Modified) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO. Rousseau.830001.US0	SERIAL NO. *****
	APPLICANT: Leslie Rousseau	
	FILING DATE December 10, 2002	GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/JR/	426,583	4/29/1890	Davis, M.M.			
/JR/	578,322	03/08/1897	Ferrell, L.C.			
/JR/	4,641,264	02/03/1987	Nitta et al.			
/JR/	4,706,212	11/10/1987	Toma			
/JR/	4,769,846	09/06/1988	Simmons			
/JR/	4,980,829	12/25/1990	Okajima et al.			
/JR/	4,984,177	01/08/1991	Rondel et al.			
/JR/	5,175,793	12/29/1992	Sakamoto et al.			
/JR/	5,181,256	01/19/1993	Kamiya			
/JR/	5,384,701	01/24/1995	Stentiford et al.			
/JR/	5,634,086	05/27/1997	Rtischev et al.			
/JR/	5,696,980	12/09/1997	Brew			
/JR/	5,715,369	02/03/1998	Spoltman et al.			
/JR/	5,724,526	03/03/1998	Kunita			
/JR/	5,749,072	05/05/1998	Kazurklewicz et al.			
/JR/	5,802,467	09/01/1998	Salazar et al.			
/JR/	6,006,185	12/21/1999	Immarco			
/JR/	6,112,103	08/29/2000	Pathuff			
/JR/	6,173,250	01/09/2001	Jong			
/JR/	6,173,250	01/09/2001	Jong			
/JR/	6,175,819	01/16/2001	Alstine, Van			
/JR/	6,263,202	7/17/2001	Kato et al.			
/JR/	6,339,706	01/15/2002	Tillgren et al.			

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLISHED DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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U.S. PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Date	Name
/JR/		5,845,243	12.01.98	Smart et al.
/JR/		5,995,151	11.30.99	Naveen et al.
/JR/		6,115,689	09.05.00	Malvar

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Date	Country

OTHER DOCUMENTS

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
/JR/		Yang et al., "An Inter-Channel Redundancy Removal Approach for High-Quality Multichannel Audio Compression," in <i>AES 109th Convention</i> , Los Angeles, California, 8 pp. (September 2000). ✓
/JR/		Wang et al., "A Multichannel Audio Coding Algorithm for Inter-Channel Redundancy Removal," in <i>AES 110th Convention</i> , Amsterdam, the Netherlands, 6pp. (May 2001).
/JR/		Yang et al., "Adaptive Karhunen-Loeve Transform for Enhanced Multichannel Audio Coding," Proc. SPIE Vol. 4475, 13 pp., Mathematics of Data/Image Coding, Compression, and Encryption IV San Diego, CA. (July 29 - August 3, 2001). ✓
/JR/		Vaidyanathan, <i>Multirate Systems and Filter Banks</i> , Prentice Hall Signal Processing Series, Cover page, pp. 745-751 (1992). ✓
/JR/		"MPEG2 Audio for DVD: the Compromise Choice," 5 pp. (October 1996). ✓
/JR/		Edler et al., "Perceptual Audio Coding Using a Time-Varying Linear Pre- and Post-Filter," in <i>AES 109th Convention</i> , Los Angeles, California, 12 pp. (September 2000). ✓

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/JR/		"ISO/IEC 13818-7, Information Technology -- Generic Coding of Moving Pictures and Associated Audio Information -- Part 7: Advanced Audio Coding (AAC)," 174 pp. (1997).		✓
/JR/		Wang et al., "EE225a Lecture 13: Karhunen Loève Transform and Discrete Cosine Transform," Department of EECS, University of California at Berkley, 10 pp. (March 2002).		✓
/JR/		Meares, D.J., "Matrixed Surround Sound in an MPEG Digital World," <i>Journal of the Audio Engineering Society</i> , Vol. 46, No. 4, 13 pp. (April 1998).		✓
/JR/		Stuart et al., "Lossless Compression for DVD-Audio," in <i>AES 9th Regional Convention Tokyo</i> , 4 pp. (1999).		✓
/JR/		Kuo et al., "A Study of Why Cross Channel Prediction is Not Applicable to Perceptual Audio Coding," <i>IEEE Signal Processing Letters</i> , Vol. 8, No. 9, 3 pp. (September 2001).		✓
/JR/		Van Assche et al., "Lossless Compression of Pre-Press Image Using a Novel Color Decorrelation Technique," <i>Proc. SPIE, Very High Resolution and Quality III</i> . Vol. 3308, 8 pp. (1998).		✓
/JR/		Davis, "The AC-3 Multichannel Coder," Dolby Laboratories, 9 pp. (Downloaded from the World Wide Web on August 15, 2002).		✓
/JR/		Gibson et al., <u>Digital Compression for Multimedia</u> , Title Page, Contents, "Chapter 7: Frequency Domain Coding," Morgan Kaufman Publishers, Inc., pp. iii, v-xi, and 227-262 (1998).		✓
/JR/		Herley et al., "Tilings of the Time-Frequency Plane: Construction of Arbitrary Orthogonal Bases and Fast Tiling Algorithms," <i>IEEE Transactions on Signal Processing</i> , Vol. 41, No. 12, pp. 3341-59 (1993).		✓
/JR/		"ISO/IEC 11172-3, Information Technology -- Coding of Moving Pictures and Associated Audio for Digital Storage Media at Up to About 1.5 Mbit/s -- Part 3: Audio," 154 pp. (1993).		✓
/JR/		ITU, Recommendation ITU-R BS 1115, Low Bit-Rate Audio Coding, 9 pp. (1994).		✓
/JR/		Solari, <u>Digital Video and Audio Compression</u> , Title Page, Contents, "Chapter 8: Sound and Audio," McGraw-Hill, Inc., pp. iii, v-vi, and 187-211 (1997).		✓
/JR/		"ATSC Standard: Digital Audio Compression (AC-3), Revision A," 140 pp. (August 2001).		✓
/JR/		Chen et al., U.S. Patent Application Serial No. 10/017,702, entitled, "Quantization Matrices for Digital Audio," filed December 14, 2001.		✓

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/JR/		Chen et al., U.S. Patent Application Serial No. 10/017,861, entitled, "Techniques for Measurement of Perceptual Audio Quality," filed December 14, 2001. ✓	
/JR/		Chen et al., U.S. Patent Application Serial No. 10/020,708, entitled, "Adaptive Window-Size Selection in Transform Coding," filed December 14, 2001. ✓	
/JR/		Chen et al., U.S. Patent Application Serial No. 10/016,918, entitled, "Quality Improvement Techniques in an Audio Encoder," filed December 14, 2001. ✓	
/JR/		Chen et al., U.S. Patent Application Serial No. 10/017,694, entitled, "Quality and Rate Control Strategy for Digital Audio," filed December 14, 2001. ✓	

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